Sustainable Financing for SDG 11.2

Based on: Sustainable Urban Transport Financing from the Sidewalk to the Subway
Capital, Operations, and Maintenance Financing

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World Bank
Sustainable Development Goal 11

Make cities and human settlements inclusive, safe, resilient and sustainable
By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
11.2 Associated Indicator:

11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities
Public transport to access jobs
However, the playing field is biased against public transport
Low revenue - Implicit subsidies

Figure 1.5  Total Costs (Explicit and Implicit) and Benefits of Cars and Public Transport

Source: Authors.
Low revenue - Implicit subsidies

PUBLIC TRANSPORT

PRIVATE CARS

Stigma

Explicit Subsidies

Pocket costs

Political Support

Status

Implicit Subsidies

Pocket costs
The underfunding trap

Figure 1.1 Typical Pattern of Capital, Operation, and Maintenance Expenditures for Transport
Underfunding Trap: structural causes

LOW REVENUES DUE TO INEFFICIENT PRICING AND ECONOMIC DISTORTIONS that creates unbalance in favor of unsustainable modes

LOW INVESTMENT causes construction and maintenance lag vicious cycle and deterioration

IMBALANCE IN INVESTMENT RESPONSIBILITIES AND FINANCIAL CAPACITY at the city level

INSTITUTIONAL COMPLEXITY: diverse levels (global, national, local) and sectors (public, private)

PERIODICITY MISMATCH between Revenue and Expenditure
The framework addresses the following elements:

- **Economic distortions and institutional complexity** through application of the “Who Benefits Pays” principle based on the identification of beneficiaries (general public or direct and indirect beneficiaries)

- The need for **wiser investments**, which can reduce the financing gap in the long term
• Match periodicity of revenue and expenditures, specifically for capital, operation, and maintenance expenses.
Escaping the underfunding trap

A comprehensive multi-level financial strategy that corrects structural causes from revenue and expenditure side
Analytical framework to assess and design urban transport financing

Standardized Assessment of 24 urban transport financing instruments with respect to

- **FINANCIAL SUSTAINABILITY (Innovative financing)**
  - stability, political acceptance, and administrative ease of instrument implementation

- **TRANSPORT SUSTAINABILITY (Wise investment)**
  - economic efficiency, social equity, and environmental impact
## Financing Instruments Assessment: General Beneficiaries

<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Rev Level</th>
<th>Stability</th>
<th>Public Accept</th>
<th>Admin Ease</th>
<th>Efficiency</th>
<th>Equity</th>
<th>Environ. Impact</th>
<th>Cost</th>
<th>Period</th>
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<tbody>
<tr>
<td>Public transport subsidies</td>
<td>M/O</td>
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<td>Property tax</td>
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<td>National and international loans and grants</td>
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<td>Global Environment Facility</td>
<td>C/O</td>
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<td>Clean Technology Fund</td>
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<td>PPPs for public transport</td>
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</table>

### Notes:
- ▲: Upfront
- △: Recurrent
- ▲: Both
- Green: High
- Yellow: Average
- Red: Low

**Cost**
- M/O: Medium/Other
- C: Capital
- C/M/O: Capital/Medium/Other
## Financing Instruments Assessment: General Beneficiaries

<table>
<thead>
<tr>
<th><strong>FINANCING INSTRUMENT</strong></th>
<th>REV LEVEL</th>
<th><strong>FINANCIAL SUSTAINABILITY</strong></th>
<th><strong>TRANSPORT SUSTAINABILITY</strong></th>
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## Financing Instruments Assessment: Direct Beneficiaries

### Financing Instruments

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<tr>
<th>Financing Instrument</th>
<th>REVENUE LEVEL</th>
<th>STABILITY</th>
<th>PUBLIC ACCEPTANCE</th>
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<th>EFFICIENCY</th>
<th>EQUITY</th>
<th>ENVIRON. IMPACT</th>
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### Sustainability Indicators

- **Financial Sustainability**
  - Stability
  - Public Acceptance
  - Admin Ease

- **Transport Sustainability**
  - Efficiency
  - Equity
  - Environ. Impact

### Color Codes
- **Green** (High)
- **Orange** (Average)
- **Red** (Low)

### Additional Information
- **Upfront**
- **Recurrent**
- **Both**

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The image includes a table comparing various financing instruments, such as parking charges, road pricing, congestion charges, fuel taxes/surcharges, vehicle taxation, farebox revenue, and PPPs for urban roads, assessing their financial and transport sustainability across different indicators.

The table uses color coding to indicate the level of sustainability for each instrument. Green indicates high sustainability, orange indicates average, and red indicates low sustainability.

The slide also includes a legend for understanding the sustainability level and a visual representation of the sustainability assessment.
## Financing Instruments Assessment: Indirect Beneficiaries

<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Rev Level</th>
<th>Financial Sustainability</th>
<th>Transport Sustainability</th>
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<td><img src="#" alt="High" /> <img src="#" alt="Average" /> <img src="#" alt="Low" /></td>
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Conclusions

- Combine revenue sources to ensure financial sustainability using the Who Benefits Pays principle.
- Undertake “Wise Investments” particularly public transport and NMT lower deficit.
- Consider the effect of instruments on transport demand.
- Link urban transport planning and operations with urban planning.
Conclusions

- Ensure appropriate use of public subsidies with proper incentives to guarantee high-quality sustainable public transport.
- Allow cities financial autonomy and capacity. A property tax is critical as it can finance capital, operations, and maintenance, and capture value.
Conclusions

- Allow a role for national governments and international funding in light of climate change and the need to invest in projects that contribute to the global benefit of reducing emissions from the transport sector.

- Understand the need for a gradual introduction of user charges.
Conclusions

- Consider land value–based financing instruments but be aware of transaction cost, political work behind and “asset rich, cash poor” problem.
Epilogue

PUBLIC TRANSPORT

- Political support
- Status/Pride
- Subsidies
- Pocket costs

CARS

- Status/Pride
- User charges
- Pocket costs
Download the book here

- **Sustainable Urban Transport Financing from the Sidewalk to the Subway**

or here:

- [https://openknowledge.worldbank.org/handle/10986/23521](https://openknowledge.worldbank.org/handle/10986/23521)
Thank you